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is made narrow, the width H5 of the slit lower portion is made wider than the width H3, and the portion between the slit upper portion 23e and the slit lower portion 23f are formed to be continuous through the tapered intermediate portion 23g, so that, in comparison with the structure in which the slit 23d is formed with the same width H3, the moldability in an injection molding process can be improved.

Third Embodiment 3

FIG. 13 shows a third embodiment 3 of the present invention, which is a plan view showing a state that the contact pin 25 is inserted into the slit upper portion 23e of the socket body 23.

With reference to this FIG. 13, the slit upper portion 23e of the socket body 23 is formed such that the width H6 on the mount portion side (inside) is made smaller than the width H4 of the IC lead 12b (see FIG. 12(b)) so as to prevent the IC lead 12b from intruding into the slit upper portion and the width H7 outside the slit upper portion 23e is made to be larger than the inside width H6 thereby to provide a surface tapered so as to be opened apart from the mount portion 23a.

Then, the movable contact piece 25f of the contact pin 25 is therefore formed to have a tapered surface corresponding to the tapered surface of the slit upper portion 23e.

By forming the movable contact piece 25f so as to provide a smooth tapered surface, the contact pin can be relatively easily manufactured.

Structures and functions of this third embodiment other than those mentioned above are substantially the same as those of the second embodiment 2, so that the details thereof are now omitted herein.

Further, it is to be noted that although, in the above various embodiments, the present invention is applied to the IC socket 11 or 21 as "electrical part", it is apparent that the present invention is not limited to it and is applicable to another device or apparatus. Furthermore, although the contact pin 25 in the above embodiments 2 and 3 is provided with the movable contact piece 25f and with no stationary contact piece, the contact pin 25 in these embodiments may be formed with a stationary contact pin as a two-point contact type contact pin in which each terminal of the electrical part is clamped from upper and lower sides thereof by these stationary contact piece and the movable contact piece.

Possibility of Industrial Utilization

As mentioned above, the socket for electrical parts according to the present invention is preferably usable as an IC socket to which an IC package can be detachably mounted and suitable for detachably holding the electrical parts.

What is claimed is:

1. A socket for an electrical part comprising:

a socket body provided with a mount portion on which an electrical part is mounted;

a plurality of contact pins attached to the socket body so as to restrict a downward movement of the contact pins with respect to the socket body, each of said pins being connected to a terminal of the electrical part so as to establish an electrical connection between the contact pin and the terminal; and

an operation member provided for the socket body to be vertically movable with respect to the socket body,

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each of said contact pins being formed with a stationary contact piece having a stationary contact portion contacting a lower surface of the terminal of the electrical part and a moveable piece having a moveable contact portion contacting an upper surface of the terminal of the electrical part,

said movable contact portion being contacted to or separated from the terminal of the electrical part in response to a vertical movement of the operation member, and

said stationary contact piece of the contact pin being provided with an engagement portion and said socket body being formed with an engaging portion to be engaged with an upper surface of said engagement portion to thereby limit an upper movement of the stationary contact piece.

2. The socket for an electrical part according to claim 1, wherein said socket body comprises a base member to which said contact pins are attached and a seating plate to which the mount portion is formed, said seating plate being formed with the engaging portion, and when said seating plate is mounted to said base member, said engagement portion of the contact pin is engaged with said engaging portion.

3. The socket for an electrical part according to claim 1, wherein said seating plate is formed with a guide portion for guiding said stationary contact piece so as to engage the engagement portion of the contact pin with the engaging portion of the seating plate when said seating plate is mounted to the base member.

4. The socket for an electrical part according to claim 1, wherein said stationary contact piece is formed with a springy portion which is elastically deformable against a force in a vertical direction.

5. A socket for an electrical part comprising:

a socket body provided with a mount portion to which the electrical part is mounted;

a plurality of contact pins attached to the socket body so as to restrict a downward movement of the contact pins with respect to the socket body, each of said contact pins being connected to a terminal of the electrical part so as to establish an electrical connection between the contact pin and the terminal; and

an operation member for the socket body operable to be moved vertically with respect to the socket body,

each of said contact pins being formed with a stationary contact piece having a stationary contact portion contacting a lower surface of the terminal of the electrical part and a movable contact piece having a movable contact portion contacting an upper surface of the terminal of the electrical part,

said movable contact portion being contacted to and separated from the terminal of the electrical part with the movable contact portion being moved in response to a vertical movement of the operation member, and

said stationary contact piece of the contact pin being provided with an engagement portion protruding substantially vertically from a side surface of the stationary contact piece, and said socket body being formed with an engaging portion having a lower surface being engaged with an upper surface of said engagement portion of the stationary contact piece to thereby correctly maintain an attitude of the stationary contact piece.

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6. (NEW) A socket for an electrical part comprising:

a socket body provided with a mount portion on which an electrical part is mounted;

a plurality of contact pins attached to the socket body so as to restrict a downward movement of the contact pins with respect to the socket body, each of said pins being connected to a terminal of the electrical part so as to establish an electrical connection between the contact pin and the terminal; and

an operation member provided for the socket body to be vertically movable with respect to the socket body,

each of said contact pins being formed with a stationary contact piece having a stationary portion contacting a lower surface of the terminal of the electrical part and a movable piece having a movable portion contacting an upper surface of the terminal of the electrical part,

said movable contact portion being contacted to or separated from the terminal of the electrical part in response to a vertical movement of the operation member, and

an engagement portion being formed in the vicinity of the mount portion and engaged with an upper surface of an engagement portion formed on the stationary contact piece of the contact pin to thereby limit an upper movement of the stationary contact piece.

7. (NEW) A socket for an electrical part having terminals, the socket comprising:

a socket body provided with a mount portion to mount the electrical part thereon, the socket body having a partition wall formed at least partially around the mount portion, the partition wall having slits,

a plurality of contact pins received in the socket body so as to restrict a downward movement of the contact pins with respect to the socket body, each of said contact pins having a springy portion and a movable piece with a movable contact portion connectable to a terminal of the electrical part so as to establish an electrical connection between the contact pin and the terminal; and

an operation member provided for the socket body and vertically movable with respect to the socket body, each of the slits having a first region with a first

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width and having a second region with a second width, the first width being less than the second width;

for each of said contact pins, the springy portion fitting within the second region of the slit and the movable piece having the movable contact portion fitting within the first region of the slit,

said movable contact portion being contacted to or separated from the terminal of the electrical part in response to a vertical movement of the operation member,

said springy portion of each contact pin having a width less than the second width.

8. (NEW) A socket for an electrical part having terminals, the socket comprising:

a socket body provided with a mount portion to mount the electrical part thereon, the socket body having a partition wall formed at least partially around the mount portion, the partition wall having slits,

a plurality of contact pins received in the socket body so as to restrict a downward movement of the contact pins with respect to the socket body, each of said contact pins having a springy portion and a movable piece with a movable contact portion connectable to a terminal of the electrical part so as to establish an electrical connection between the contact pin and the terminal; and

an operation member provided for the socket body and vertically movable with respect to the socket body,

each of the slits having a first region with a first width and having a second region with a second width, the first width being less than the second width;

for each of said contact pins, the springy portion fitting within the second region of the slit and the movable piece having the movable contact portion fitting within the first region of the slit,

said movable contact portion being contacted to or separated from the terminal of the electrical part in response to a vertical movement of the operation member,

said springy portion of each contact pin having a width less than the second width, and

wherein the terminals of the electrical part each have a width greater than the first width of the slits so as to prevent the terminals of the electrical part from intruding into the slits when the electrical part is mounted on the mount portion.

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9. (NEW) A mounted device comprising:
a socket body provided with a mount portion;
an electrical part mounted on the mount portion of
the socket body, the electrical part having terminals;
a plurality of contact pins received in the socket body
so as to respectfully contact the terminals of the electrical
part; and
an operation member provided for the socket body
and vertically movable with respect to the socket body,
each of said contact pins being provided with a
movable contact piece contacting the terminal,
said socket body having a partition wall formed at
least partially around the mount portion, the partition wall
having slits into which said movable contact pieces are
respectively inserted,
each said movable contact piece being separated
from the respective terminal when the operation member
is moved vertically with respect to the socket body, the
slits formed in the partition wall having a width less than a
width of the terminals of the electrical part so as to
prevent the terminals of the electrical part from intruding
into the slits.
10. (NEW) A mounted device according to claim 9,
 wherein
the contact pins each have an elastically deformable
springy portion,
for each contact pin, said movable contact piece has a
width less than that of the elastically deformable springy
portion.
11. (NEW) A mounted device according to claim 9,
 wherein
the slits each have first region into which the
movable contact piece is inserted and have a second
region,
the first region of said slit has a width less than a
width of said second region of the slit,
the second regions of the slits transition to the first
regions of the slits with a tapered-shape, and
each said contact pin is tapered so as to be narrower
toward the movable contact piece.
12. (NEW) A mounted device according to claim
 11, wherein
the electrical part is mounted above the mount

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- region,
the partition wall extends above and below the mount
region,
the first region of the slit extends above the mount
region, and
the second region of the slit extends below the mount
region.
13. (NEW) A method of mounting an electrical part
 having leads, comprising:
moving an operation member in a first direction with
respect to a socket body, to thereby move contact portions
of contacts pins away from a mount portion of the socket
body, the socket body having a partition wall at least
partially surrounding the mount portion, the partition wall
having slits, the contact portions of the contact pins being
inserted into the slits of the partition wall;
placing the electrical part on the mount portion;
moving the operation member in a second direction
with respect to the socket body, to thereby move the
contact portions of the contacts pins into contact with the
terminals of the electrical part; and
preventing the leads of the electrical part from
entering the slits in the partition wall by having the slits in
the partition wall be narrower than the leads of the
electrical part.
14. (NEW) A method of mounting an electrical part,
 according to claim 13, wherein
the operation member has a cam,
the contact pins respectively have operation pieces
that ride on the cam, and
moving the operation member with respect to the
socket body causes the operation pieces of the contact
pins to move with respect to the cam of the operation
member.